

REMARKS

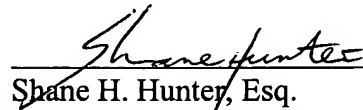
In response to the Office Action dated August 31, 2004, Applicant respectfully requests reconsideration.

Claims 31-35 and 40-44 stand rejected under the judicially created doctrine of double patenting over claims 1-25 of U.S. Patent No. 6,624,390. The Examiner noted that a terminal disclaimer, while referred to in a Response dated June 4, 2004, was not received. Applicants inadvertently omitted the terminal disclaimer from that Response. A terminal disclaimer is submitted concurrently with this response, thus obviating the double patenting rejection of claims 31-35 and 40-44.

Claims 31-35 and 40-44 stand rejected under 35 USC 103(a) over the discussion in the specification at pages 2-3 and U.S. Pat. No. 3,033,968 (Julie). Applicants respectfully assert that these claims are patentable over pages 2-3 of the specification and Julie. Pages 2-3 of the specification, cited by the Examiner, discuss that prior art techniques yield plastic deformations in crystal blanks when annealing the blanks. Julie discusses a temperature-regulated oven system that includes a heating sheet 64 (FIG. 7) surrounding a metal box 62. An auxiliary heater 71 is mounted to the box 62. The heating sheet 64 provides heat such that a temperature inside the sheet 64 is slightly below the desired temperature inside the box 62. Col. 5, lines 47-49. The auxiliary heater 71, in accordance with temperature readings from a thermostat 66, injects additional heat into the box 62 such that the temperature in the box 62 will be at the desired temperature. Col. 5, lines 21-25; Col. 7, lines 20-35 (claim 1). Thus, Julie discusses a system for regulating temperature in an oven at a desired level. Nothing cited in Julie, however, teaches, discloses, or suggests controlling the desired temperature level inside the oven in any particular manner when decreasing temperature of an item inside the oven from an annealing temperature to ambient temperature. Independent claim 31 recites an annealing system that includes heating means for cooling at least one single crystal blank from an annealing temperature to an ambient temperature substantially without plastic deformations developing in the at least one blank. Independent claim 40 recites an annealing system that includes a controller configured to control amounts of heat provided to a single-crystal blank such that the temperature of the blank decreases from an annealing temperature to an ambient temperature substantially without plastic deformation developing in the blank. For at least these reasons, independent claims 31 and 40,

and claims 32-35 and 41-44, that depend directly or indirectly from claims 31 and 40, respectively, are patentable over pages 2-3 of the specification and Julie.

Based on the foregoing, this application is believed to be in allowable condition, and a notice to that effect is respectfully requested. The Examiner is invited to call the Applicants' Attorney at the number provided below with any questions.



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